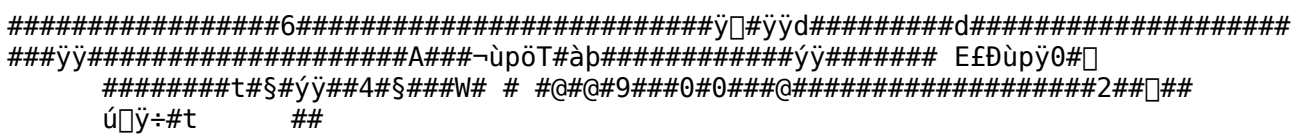

```
#
#########
#####6###########
#########
####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ,###ÿÿ####Tÿl#ÿÿK#########d#########□###Involves the application of
knowledge about human capacities and limitations to the design of workplaces,
jobs, tasks, tools, equipment, and the environment.O
```

#################6##########################ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ(###ÿÿ####Uÿl#ÿÿK#########d#########n###Occupational Safety and Health
Act (OSHA)Ergonomics Protection StandardAmericans with Disabilities Act (ADA)

#$#########$#####6###########$#########$####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ,###ÿÿ####Uÿl#ÿÿK#########d#########p###Reduce the risk of CTDIncrease
productivityIncrease safetyImprove quality of workDecrease fatigue and errors

```
#(#########(#####6###########(#########(####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ####ÿÿ####Uÿl#ÿÿK#########d#########□###Average Cost of a Single Back
Injury was $24,000 in 1994.Average Cost of all other injuries was $17,000.
                              (Army Safety Center)#
```

#)#########)#####6###########)#########)####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ,###ÿÿ####Uÿl#ÿÿK#########d#########s###Approximately 24% of all workplace injuries are back injuries.Back injuries cost US Business $36 Billion per year.ÿ

#(#########(#####6###########(#########(####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ0###ÿÿ####Tÿl#ÿÿK#########d#########D###Decreased productivity costs 8-10 times more than health care costs.

```
#)#########)#####6###########)#########)####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ0###ÿÿ####Tÿl#ÿÿK#########d#########J###50%  of the workforce will be
at risk of developing a CTD by the year 2000
```

#(#########(#####6###########(#########(####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ0###ÿÿ####Tÿl#ÿÿK#########d#########B###Carpal Tunnel Syndrome is the fastest growing occupational injury.

#(#########(#####6###########(#########(####ÿ□#ÿÿd#########d#########2##□## ö□ü□#\#ÿÿ,###ÿÿ####Uÿl#ÿÿK#########d#########p### 1985 - CTD accounted for 18% of all occupational injuries1989 - CTD accounted for 52% of occupational injuries

#(#########(#####6###########(#########(####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ,###ÿÿ####Tÿl#ÿÿK#########d#########\###Highest CTD Rates   Meatpacking
Plants   Poultry Processing   Motor Vehicle Manufacturing

#)#########)#####6###########)#########)####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ0###ÿÿ####Uÿl#ÿÿK#########d#########K### Aging Population More women
and immigrant in the workforce (64% by 2000)#

#################6##########################ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ,###ÿÿ####Uÿl#ÿÿK#########d#########y###Reaction time lengthensWorkload
capacity decreasesTemperature related discomfort increasesVisual capabilities
decreasee

#################6##########################ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ0###ÿÿ####Tÿl#ÿÿK#########d#########M### Cross sectional size of carpal tunnel decreases  10-35% with ulnar deviationþ

#################<###########################ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ<###ÿÿ####Tÿl#ÿÿK#########d#########6###Vehicle operators have greater risk for back problems.

#################<##########################ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ6###ÿÿ####Tÿl#ÿÿK#########d#########b###Performance of the same motion
or motion pattern every few seconds for more than 2 hours at a time

```
#################<##########################ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ6###ÿÿ####Tÿl#ÿÿK#########d#########9###Fixed or awkward posture for
more than a total of 2 hours#
```

```
#################<##########################ÿ#ÿÿd#########d#########2####
öü#\#ÿÿ6###ÿÿ####Tÿl#ÿÿK#########d#########8###Forceful hand exertions for
more than a total of 2 hours
```

#################<##########################ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ6###ÿÿ####Tÿl#ÿÿK#########d#########N###Use of vibrating or impact
tools or equipment for more than a total of 2 hours

```
#     #########   #####6########### #########
      ####ÿ□#ÿÿd#########d#########2##□##
ö□ü□#\#ÿÿ0###ÿÿ####Tÿl#ÿÿK#########d#########T###Employee / □home-made□ changes
to the workplaceImportant warning signs of problems
```